TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED OFFICE (DO/US)

PCT/DE00/02025	**21 June 2000**	**29 June 1999**
International Application Number	International Filing Date	Priority Date(s) Claimed

COMMUNICATIONS SYSTEM AND COMMUNICATIONS METHOD FOR AN AUTOMATION DEVICE WITH COMMUNICATIONS DATA STORED IN THE AUTOMATION DEVICE

Title of Invention

Joachim Schmitt

Applicant(s) for DO/US

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Washington, D.C. 20231

To the United States Designated Office (DO/US):

I.   Accompanying this transmittal letter are certain items which are required under 35 U.S.C. 371 in order that United States National processing of the above identified International application may commence:

( )   at the expiration of the applicable time limit under PCT Articles 22 and 39(1) according to the provisions of 35 U.S.C. 371(b).

(X)   as soon as possible upon receipt of this express request under 35 U.S.C. 371(f).

1.   The U.S. National fee [35 U.S.C. 371(c)(1)]

a. ( ) was previously transmitted by applicant on (date)____.

b. (X) is submitted herewith as follows:

FOR FEE	NO. FILED	NO. EXTRA	SMALL ENTITY RATE	FEE	or	OTHER THAN SMALL ENTITY RATE
Basic Fee	Search Report Prepared by EPO		/////	$445	or /////	$ 890
Total Claims	20 -20 =	0	x 9 =		or x18 =	$
Ind. Claims	3-3	0	x 42 =		or x84 =	$
( ) Multiple Dependent Claim Presented			+140 =		or + 280 =	$
	TOTAL NATIONAL FEE			$____	or	**$ 890**

i. ( ) Enclosed are two checks which total the amount of
to cover the basic filing fee, the multiple dependent claim
fee, and the excess independent claim fee.

ii. (X) A Preliminary Amendment canceling claims is enclosed. The calculation
of the filing fees pursuant to 37 C.F.R. §1.16(b), (c) and (d) is based on the claims
remaining after the Preliminary Amendment. *Please charge the* filing fee, multiple
dependent claim fee (if applicable), excess independent claims fee (if applicable), and
excess total claims fee (if applicable) to Deposit Account No. 23-1703.

iii. (X) **The Commissioner is hereby authorized to charge any additional
fees which may be required, or credit any overpayment to Deposit
Account No. 23-1703.** A duplicate copy of this sheet is enclosed.

2. A copy of the International application as filed [35 U.S.C. 371(c)(2)]:

a. (X) is transmitted herewith.

b. ( ) is not required as the application was filed with the United States
Receiving Office.

c. ( ) has been transmitted

i. ( ) by the International Bureau. Date of mailing of the application (from
form PCT/IB/308): _____ A copy of form PCT/IB/308 is
enclosed.

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ii. ( ) by applicant on (date) _____.

3.   A translation of the International application into the English language [35 U.S.C. 371(c)(2)]:

a. (X) is transmitted herewith.

b. ( ) is not required as the application was filed in English.

c. ( ) was previously transmitted by applicant on (date)_____.

4.   Amendments to the claims of the International application under PCT Article 19 [35 U.S.C. 371(c)(3)]:

a. ( ) are transmitted herewith

b. ( ) have been transmitted

   i. ( ) by the International Bureau. Date of mailing of the amendments (from form PCT/IB/308): _____.

   ii. ( ) by applicant on (date) _____.

c. (X) have not been transmitted as

   i. ( ) no notification has been received that the International Searching Authority has received the Search Copy.

   ii. ( ) the Search Copy was received by the International Searching Authority but the Search Report has not yet issued. Date of receipt of Search Copy (from form PCT/ISA/202): _____.

   iii. ( ) applicant chose not to make amendments under PCT Article 19. Date of mailing of Search Report (from form PCT/ISA/210):   .

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iv. ( ) the time limit for the submission of amendments has not
yet expired. The amendments or a statement that
amendments have not been made will be transmitted before
the expiration of the time limit under PCT Rule 46.1.

5.   A Translation of the amendments to the claims under PCT Article 19 [35
U.S.C. 371(c)(3)]:

a. ( ) is transmitted herewith.

b. ( ) is not required as the amendments were made in the English language.

c. ( ) has not been transmitted for reasons indicated
at point I.4.b. or c. above.

6.   An original executed declaration for patent application of the inventors [35
U.S.C. 371(c)(4)] complying with 35 U.S.C. 115:

a. ( ) was previously submitted by applicant on (date)
_____

b. (X) is submitted herewith;
and such oath or declaration

i. (X) is attached to the application.

ii. ( ) identify the application and any amendments under
PCT Article 19 which were transmitted as stated in
points 1.2.b. or c. and 1.4. and states that they were
reviewed by the inventor as required by 37 CFR 1.70.

c. ( ) will be submitted subsequently.

II. Concerning other documents:

1.   An International Search Report or Declaration under PCT Article 17(2)(a):

a. ( ) has been transmitted by the International Bureau. Date of mailing (from
form PCT/IB/308): _____ A copy of form PCT/IB/308 is enclosed

b. ( ) is not required as the application was searched by the United States
International Searching Authority.

c. (X) A copy of the International Search Report and International Preliminary
Examination Report are transmitted herewith.

d. ( ) has been submitted by applicant on (date) _____.

2. A Statement of prior art under 37 CFR 1.97 and 1.98:

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new york 844600 [$3p401!.doc]

a. ( ) is transmitted herewith including copies of the references cited on the attached form PTO-1449.

b. (**X**) will be transmitted within THREE MONTHS of the date of submission of requirements under 35 U.S.C. 371(c).

c. ( ) was previously submitted by applicant on _____, in application serial no. _____.

3. (X) An original executed Assignment is transmitted herewith for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.

    a. (**X**) **Please charge the $40.00 assignment recordation fee to Deposit Account No. 23-1703.**

    b. ( ) Enclosed is a check in the amount of **$__**.

4. **Other document(s) or information included:**
- Copy of Antrag - PCT/RO/101 Easy Version 2.90;
- Copy of PCT/IPEA/416;
- Preliminary Amendment;
- Signed Declaration/Power of Attorney;
- One sheet of formal drawing (Figures 1 and 2);
- International Search Report PCT/ISA/220; and
- Return postcard.

Respectfully submitted,

Date: December 28, 2001

Scott T. Weingaertner
Reg. No. 37,756
Applicants' Attorney
Attorney's Direct Line (212)-819-8404
Customer No. 007470
(212) 819-8200

Enclosures

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new york 844600 [$3p401!.doc]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants : Schmitt, J.

Serial No. : To be assigned

Filed : Herewith

For : COMMUNICATIONS SYSTEM AND COMMUNICATIONS METHOD FOR AN AUTOMATION DEVICE WITH COMMUNICATIONS DATA STORED IN THE AUTOMATION DEVICE

Examiner : To be assigned

Group Art Unit : To be assigned

Box Patent Application
Assistant Commissioner for Patents
Washington, D.C. 20231

Express Mail Label: EL 608305319 US

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Michael Ramos
Name of person mailing paper or fee

Michael Ramos
Signature of person mailing paper or fee

PRELIMINARY AMENDMENT

Sir:

Preliminary to examination on the merits, please amend the application as follows:

IN THE SPECIFICATION:

On page 1, first line, delete: "Description".

On page 1, immediately before paragraph [0001], insert: --Field of the Invention--.

On page 1, before paragraph [0002], insert: --Background--.

On page 1, before paragraph [0003], insert: --Summary of the Invention--.

On page 3, before paragraph [0012], insert: --Brief Description of the Figures--

On page 4, before paragraph [0014], insert: --Detailed Description of the Invention--.

Please delete paragraph 0015 and substitute the following new paragraph 0015:

--[0015] The central element of the communications system shown in Figure 1 is the memory 4 of the automation device 1. The memory 4 stores the information relating to the automation device 1 and also the communications protocols for the automation device 1. This means that the device information stored in the application program in previous solutions migrates from the application program to the automation device 1. To this end, the operating dialogs and communications protocols are stored in the memory 4 in the form of, in particular, compiled Java objects. The memory 4 used is, by way of example, a RAM, EEPROM, FLASH, etc. memory. In this context, the memory requirement is kept as low as possible on

account of a compressed storage form. For operation, the respectively required

operating dialogs and communications protocols are transferred from the memory 4,

i.e. from the automation device 1, to the data processing apparatus 2, for example to

a personal computer or a programming device. There, these operating dialogs and

communications protocols are executed and displayed by the application program 5,

for example an Internet browser or a similar program. For the data interchange via

the data link 3, a standard protocol, such as TCP (= Transport Communication

Protocol) or IP (= Internet Protocol), is used, in particular. The advantages of the

communications system shown in Figure 1 are as follows: the operating dialogs and

communications protocols are always suitable for the automation device, since they

are provided by the automation device itself, which is also advantageous particularly

when device versions are changed. In addition, there is no or only very little difficulty

for matching and/or changing over an application program 5 to a new automation

device 1. The logical use of a standard communications protocol results in

maintenance efforts being further reduced. In addition, increased use of innovative

techniques, such as Internet-based service and support, becomes possible.--

Please delete paragraph 0016 and substitute the following new paragraph 0016:

--[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a

communications system having an automation device 1 that can communicate with

data processing apparatuses 2, 8 via data links 3, 3a. The automation device 1,

again, has a memory 4 for storing communications data and device information. The

first data processing apparatus 2 again contains an application program 5 for

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communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.--

On page 10, after "Abstract", delete "Communications system and communications method for an automation device with communications data stored in the automation device".

Please delete Abstract, and substitute the following new Abstract:

--The invention relates to a communications system for communications between a data processing apparatus and an automation device. For simplified operation of the automation device virtually independently of a specific application program with specific device information relating to the automation device, the invention proposes that the automation device have a memory for storing communications data for communicating, in particular, with a standardized communications program. This means that the communications data are firmly connected to the automation device, and the operating dialogs and/or communications protocols are thus always suitable for the respective automation device. This permits logical use of standard communications programs, for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the environment of automation devices.--

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IN THE CLAIMS:

Please cancel claims 1-12 without prejudice and add new claims 13-32:

--13. (New) A communications system for communication over a data network comprising:

a data processing apparatus running a browser; and

an automation device in communication with the data processing apparatus over the data network, the automation device comprising:

a memory arranged in the automation device and storing communications data, the communications data comprising:

operating dialogs for the operation of the automation device and for communication with the browser in the data processing apparatus, and

device information for service and support of the automation device over the data network ;

whereby the stored communications data and device information are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol.

14. (New) The communications system according to claim 13, wherein the operating dialogs comprise Java objects.

15. (New) The communications system according to claim 13, wherein the communications data stored in the memory comprise data in compressed form.

16. (New) The communications system according to claim 14, wherein the communications data stored in memory comprise data in compressed form.

17. (New) The communications system according to claim 13, wherein the data network comprises an Internet.

18. (New) The communications system according to claim 13, wherein the browser comprises an Internet browser.

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19. (New) The communications system according to claim 13, wherein the communications data stored in the memory are transferred from the automation device to the data processing apparatus for operating the automation device.

20. (New) The communications system according to claim 13, wherein the communications data transferred from the automation device to the data processing apparatus are executed in the browser and are displayed by the data processing apparatus.

21. (New) The communications system according to claim 13, further comprising at least a second data processing apparatus having a browser and in communication with the automation device over the data network, and wherein the stored communications data and device information are transmitted from the automation device to the second data processor over the data network by way of a standard protocol.

22. (New) The communications system according to claim 21, wherein the second data processing apparatus is in communication with the automation device via the Internet.

23. (New) A method for communications over a data network between a data processing apparatus having a browser and an automation device, the method comprising the steps of:

storing, in a memory arranged in the automation device, communications data for communicating with the browser, the communications data comprising

operating dialogs for the operation of the automation device and communications with the browser in the data processing apparatus, and

device information for service and support of the automation device over the data network; and

transmitting the stored communications data and device information from the automation device to the data processor over the data network by way of a standard protocol.

24. (New) The method according to claim 23, wherein the communications data comprises Java objects.

25. (New) The method according to claim 23, wherein the communications data stored in the memory comprises data in compressed form.

26. (New) The method according to claim 23, wherein the browser comprises an Internet browser.

27. (New) The method according to claim 23, wherein the communications data transferred from the automation device to the data processing apparatus are executed in the browser and are displayed by the data processing apparatus.

28. (New) An automation device for communications over a data network with at least one data processing apparatus having a browser, the automation device comprising:

    a memory arranged in the automation device and storing communications data comprising:

        operating dialogs for the operation of the automation device and communication with the browser in the data processing apparatus, and

        device information for service and support of the automation device over the data network ,

whereby the stored communications data and device information are transmitted from the automation device to the data processing apparatus over the data network by way of a standard protocol.

29. (New) The automation device according to claim 28, wherein the communications data comprises Java objects.

30. (New) The automation device according to claim 28, wherein the communications data comprises data stored in the memory in compressed form.

31. (New) The automation device according to claim 28, wherein the data network comprises an Internet.

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32. (New) The automation device according to claim 28, wherein the at least one data processing apparatus comprises a plurality of apparatuses and the stored communications data and device information are transmitted from the automation device to the plurality of data processing apparatuses over the data network.--

REMARKS

Upon entry of this Preliminary Amendment, claims 13-32 are pending. Support for new claims 13-32 is provided in the specification, including the originally filed claims. No new matter has been added.

This amendment is voluntary and not in response to any rejection made in this application.

Authorization is given to charge Deposit Account No. 19-2179 for any fee due in connection with this communication.

Dated: December 28, 2001

Respectfully submitted,

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Registration No. 37,756

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Version With Markings to Show Changes Made

[0015] The central element of the communications system shown in Figure 1 is the

memory 4 of the automation device 1. The memory 4 stores the information relating

to the automation device 1 and also the communications protocols for the

automation device 1. This means that the device information stored in the

application program in previous solutions migrates from the application program to

the automation device 1. To this end, the operating dialogs and communications

protocols are stored in the memory 4 in the form of, in particular, compiled Java

objects. The memory 4 used is, by way of example, a RAM, EEPROM, [SLASH]

FLASH, etc. memory. In this context, the memory requirement is kept as low as

possible on account of a compressed storage form. For operation, the respectively

required operating dialogs and communications protocols are transferred from the

memory 4, i.e. from the automation device 1, to the data processing apparatus 2, for

example to a personal computer or a programming device. There, these operating

dialogs and communications protocols are executed and displayed by the application

program 5, for example an Internet browser or a similar program. For the data

interchange via the data link 3, a standard protocol, such as TCP (= Transport

Communication Protocol) or IP (= Internet Protocol), is used, in particular. The

advantages of the communications system shown in Figure 1 are as follows: the

operating dialogs and communications protocols are always suitable for the

automation device, since they are provided by the automation device itself, which is

also advantageous particularly when device versions are changed. In addition, there

is no or only very little difficulty for matching and/or changing over an application

program 5 to a new automation device 1. The logical use of a standard

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communications protocol results in maintenance efforts being further reduced. In addition, increased use of innovative techniques, such as Internet-based service and support, becomes possible.

[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device 1 that can communicate with data processing apparatuses 2, 8 via data links 3, 3a. The [first data processing apparatus] automation device 1, again, has a memory 4 for storing communications data and device information. The first data processing apparatus 2 again contains an application program 5 for communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.

Abstract

The invention relates to a communications system for communications between a data processing apparatus [(2)] and an automation device [(1)]. For simplified operation of the automation device [(1)] virtually independently of a specific application program with specific device information relating to the automation device [(1)], the invention proposes that the automation device [(1)] have a memory [(4)] for storing communications data for communicating, in particular, with a standardized communications program [(5)]. This means that the communications data are firmly connected to the automation device [(1)], and the operating dialogs and/or communications protocols are thus always suitable for the respective automation device [(1)]. This permits logical use of standard communications programs [(5)], for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the environment of automation devices [(1)].

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Description

Communications system and communications method for an automation device with communications data stored in the automation device

[0001] The invention relates to a communications system and to a communications method for communications between a data processing apparatus.

[0002] Such a communications system is required, for example, for communications in the field of automation drive technology. In this context, during configuration, parameter assignment, during startup, etc., it is necessary to operate the automation device from a data processing apparatus, for example a personal computer or a special programming device. Such operation is performed, by way of example, using a specific application program containing information relating to the respective automation device.

[0003] The invention is based on the object of specifying a communications system and a communications method which allow communications between data processing apparatus and automation device as independently of the application program as possible.

[0004] This object is achieved by a communications system for communications between a data processing apparatus and an automation device having a memory, arranged in the automation device, for storing communications data for communicating with a communications program.

[0005] This object is also achieved by a method for communications between a data processing apparatus and an automation device, in which communications data stored in a memory of the automation device are transferred from the automation device to the data processing apparatus and are executed for communication with a communications program.

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[0006] The invention is based on the realization that the operation of an automation device using an application program which incorporates device information has particular drawbacks. A first drawback is that the user first needs to install the application program so that communication with the automation device becomes possible. Another drawback is that new versions of an automation device first need to be made known to the application program before the automation device can also be operated with the new version. The result of these drawbacks is that changes to the automation device or to the data interchange method always need the application program to be changed as well. With the inventive communications system, the communications data, i.e., the device information and the communications protocols, are stored in the automation device itself. For operation, the respectively required operating dialogs and communications protocols are then transferred to the data processing apparatus, for example to a PC or to a programming device. In the data processing apparatus, the operating dialogs and communications protocols are then executed and displayed by the application program, for example a standardized Internet browser or a similar program. Consequently, the information relating to the automation device migrates from the application program to the automation device itself, which means that the operating dialogs and communications protocols are always suitable for the respective automation device. Changes in the device are therefore independent of the application program, so that corresponding changes in the application program are not necessary.

[0007] Standard data transfer suitable for a multiplicity of communications programs can be ensured by virtue of the memory being provided for storing operating dialogs and/or communications protocols in the form of Java objects.

[0008] The memory requirement needed in the automation device can be kept low by virtue of the communications data being stored in the memory in compressed form.

[0009] The complexity of the application program for communicating with the

automation device can be kept to a minimum by virtue of the communications program being an Internet browser, and by virtue of a standard protocol being provided for transferring the communications data between the automation device and the communications program.

[0010] Safe operation of the automation device is ensured by virtue of the communications data stored in the memory, in particular operating dialogs and communications protocols, being transferred from the automation device to the data processing apparatus for the purpose of operating the automation device.

[0011] Reliable communications between automation device and data processing apparatus is ensured by virtue of the communications data, transferred from the automation device to the data processing apparatus, being executed in the communications program, in particular an Internet browser, and being displayed by the data processing apparatus.

[0012] The invention is described and explained in more detail below using the exemplary embodiments shown in the figures.

[0013] In the figures:

Figure 1   shows a block diagram of a first exemplary embodiment of communications system having an automation device and a data processing apparatus, and

Figure 2   shows a block diagram of a second exemplary embodiment of a communications system having an automation device and a data processing apparatus.

[0014] Figure 1 shows a block diagram of a first exemplary embodiment of a communications system having an automation device 1 and a data processing apparatus 2. The automation device 1 has a memory 4 for storing device

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information and communications data. The data processing apparatus 2 contains an application program 5 which permits data interchange via a data link 3 between the data processing apparatus 2 and the automation device 1.

[0015] The central element of the communications system shown in Figure 1 is the memory 4 of the automation device 1. The memory 4 stores the information relating to the automation device 1 and also the communications protocols for the automation device 1. This means that the device information stored in the application program in previous solutions migrates from the application program to the automation device 1. To this end, the operating dialogs and communications protocols are stored in the memory 4 in the form of, in particular, compiled Java objects. The memory 4 used is, by way of example, a RAM, EEPROM, SLASH, etc. memory. In this context, the memory requirement is kept as low as possible on account of a compressed storage form. For operation, the respectively required operating dialogs and communications protocols are transferred from the memory 4, i.e. from the automation device 1, to the data processing apparatus 2, for example to a personal computer or a programming device. There, these operating dialogs and communications protocols are executed and displayed by the application program 5, for example an Internet browser or a similar program. For the data interchange via the data link 3, a standard protocol, such as TCP (= Transport Communication Protocol) or IP (= Internet Protocol), is used, in particular. The advantages of the communications system shown in Figure 1 are as follows: the operating dialogs and communications protocols are always suitable for the automation device, since they are provided by the automation device itself, which is also advantageous particularly when device versions are changed. In addition, there is no or only very little difficulty for matching and/or changing over an application program 5 to a new automation device 1. The logical use of a standard communications protocol results in maintenance efforts being further reduced. In addition, increased use of innovative techniques, such as Internet-based service and support, becomes possible.

[0016] Figure 2 shows a block diagram of a second exemplary embodiment of a communications system having an automation device 1 that can communicate with data processing apparatuses 2, 8 via data links 3, 3a. The data processing apparatus 1, again, has a memory 4 for storing communications data and device information. The first data processing apparatus 2 again contains an application program 5 for communicating with the automation device 1 via the data link 3. In addition, the communications system shown in Figure 2 provides the option of data communications between a second data processing apparatus 8 with the automation device 1 via a data link 3, 3a, via an Internet server 6 and via an Internet connection 7.

[0017] The first data processing apparatus 2 and the automation device communicate in the manner already described in connection with Figure 1. The second data processing apparatus 8 and the automation device 1 communicate using the application program 5a present in the second data processing apparatus via an Internet connection 7 to the Internet server 6, from which there is, in turn, a data link 3, 3a to the automation device 1. In this case, too, the application program 5a in the second data processing apparatus 8 accesses the device information and communications protocols in the .memory 4 of the automation device 1, which allows increased use of Internet techniques for service and support in the environment of the automation devices 1.

[0018] In summary, the invention thus relates to a communications system for communications between a data processing apparatus 2 and an automation device 1. For simplified operation of the automation device 1 virtually independently of a specific application program with specific device information relating to the automation device 1, the invention proposes that the automation device 1 have a memory 4 for storing communications data for communicating, in particular, with a standardized communications program 5. This means that the communications data are firmly associated with the automation device 1, and the operating dialogs and/or communications protocols are thus always

suitable for the respective automation device 1. This permits logical use of standard communications programs 5, for example in the form of Internet browsers. This enhances the opportunity to use Internet techniques for service and support in the surroundings of automation devices 1.

Patent Claims

1.   A communications system for communications between a data processing apparatus (2) and an automation device (1), having a memory
5   (4), arranged in the automation device (1), for storing communications data for communicating with a communications program (5).

2.   The communications system as claimed in claim 1, characterized
10   in that the memory (4) is provided for storing operating dialogs and/or communications protocols in the form of Java objects.

3.   The communications system as claimed in one of claims 1 or 2, characterized
15   in that the communications data are stored in the memory (4) in compressed form.

4.   The communications system as claimed in one of claims 1 to 3, characterized
20   in that the communications program (5) is an Internet browser, and in that a standard protocol is provided for transferring the communications data between the automation device (1) and the communications program.

5.   The communications system as claimed in one of claims 1 to 4,
25   characterized
in that the communications data stored in the memory (4), in particular operating dialogs and communications protocols, are transferred from the automation device (1) to the data processing apparatus (2) for the purpose of operating the automation device (1).

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6.   The communications system as claimed in one of claims 1 to 5, characterized

in that the communications data transferred from the automation device (1) to the data processing apparatus (2) are executed in the communications

5   program, in particular an Internet browser, and are displayed by the data processing apparatus.

7.   A method for communications between a data processing apparatus (2) and an automation device (1), in which communications data stored in a

10   memory (5) of the automation device (1) are transferred from the automation device (1) to the data processing apparatus (2) and are executed for communicating with a communications program (5).

8.   The method as claimed in claim 7,

15   characterized

in that the memory (4) stores operating dialogs and/or communications protocols in the form of Java objects.

9.   The method as claimed in one of claims 7 or 8,

20   characterized

in that the communications data are stored in the memory (4) in compressed form.

10.   The method as claimed in one of claims 7 to 9,

25   characterized

in that an Internet browser is used as the communications program (5) for communications between automation device (1) and data processing apparatus (2), and in that a standard protocol is used for transferring the communications data between the automation device (1) and the

30   communications program.

11.   The method as claimed in one of claims 7 to 10,
characterized
in that the communications data stored in the memory (4), in particular
operating dialogs and communications protocols, are transferred from the

5   automation device (1) to the data processing apparatus (2) for the purpose
of operating the automation device (1).

12.   The method as claimed in one of claims 7 to 11,
characterized

10   in that the communications data transferred from the automation device (1)
to the data processing apparatus (2) are executed in the communications
program, in particular an Internet browser, and are displayed by the data
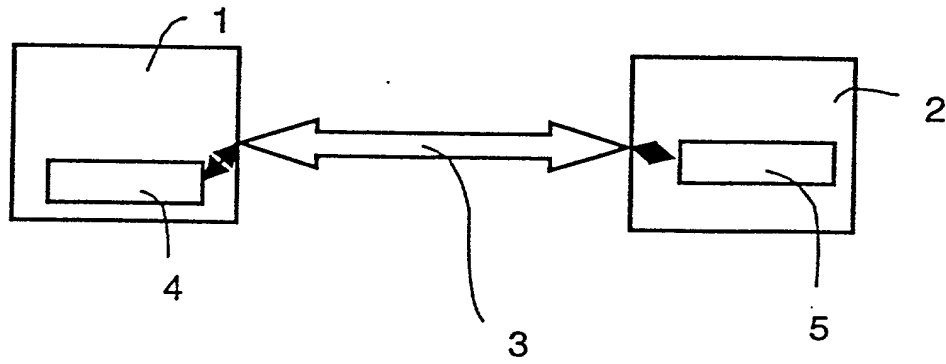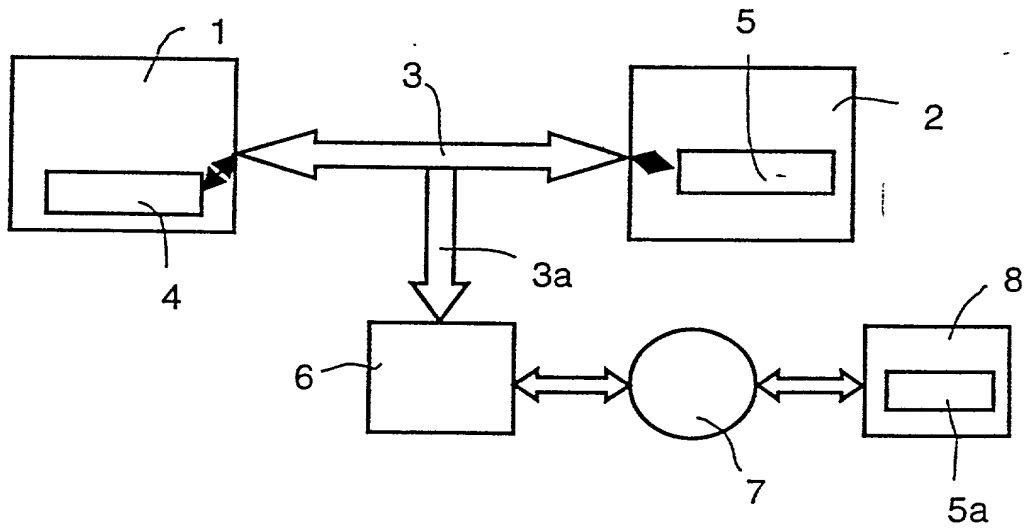processing apparatus.

Fig. 1

Fig. 2

Declaration and Power of Attorney For Patent Application
Erklärung Für Patentanmeldungen Mit Vollmacht
German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:	As a below named inventor, I hereby declare that:
dass mein Wohnsitz, meine Postanschrift, und meine Staatsangehörigkeit den im Nachstehenden nach meinem Namen aufgeführten Angaben entsprechen,	My residence, post office address and citizenship are as stated below next to my name,
dass ich, nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent beantragt wird für die Erfindung mit dem Titel:	I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

<u>Kommunikationssystem</u> und <u>Kommunitkationsverfahren für ein</u> <u>Automatisierungsgerät mit im</u> <u>Automatisierungsgerät gespeicherten</u> <u>Kommunikationsdaten</u>	<u>COMMUNICATIONS SYSTEM AND</u> <u>COMMUNICATIONS METHOD FOR AN</u> <u>AUTOMATION UNIT WITH</u> <u>COMMUNICATIONS DATA STORED IN</u> <u>SAID AUTOMATION UNIT</u>
deren Beschreibung	the specification of which
(zutreffendes ankreuzen) ☐ hier beigefügt ist. ☒ am __21.06.2000__ als PCT internationale Anmeldung PCT Anmeldungsnummer _____ PCT/DE00/02025 eingereicht wurde und am _____ abgeändert wurde (falls tatsächlich abgeändert).	(check one) ☐ is attached hereto. ☒ was filed on __21.06.2000__ as PCT international application PCT Application No. ____ PCT/DE00/02025 and was amended on _____ (if applicable)
Ich bestätige hiermit, dass ich den Inhalt der obigen Patentanmeldung einschliesslich der Ansprüche durchgesehen und verstanden habe, die eventuell durch einen Zusatzantrag wie oben erwähnt abgeändert wurde.	I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims as amended by any amendment referred to above.
Ich erkenne meine Pflicht zur Offenbarung irgendwelcher Informationen, die für die Prüfung der vorliegenden Anmeldung in Einklang mit Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) von Wichtigkeit sind, an.	I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, §1.56(a).
Ich beanspruche hiermit ausländische Prioritätsvorteile gemäss Abschnitt 35 der Zivilprozessordnung der Vereinigten Staaten, Paragraph 119 aller unten angegebenen Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde, und habe auch alle Auslandsanmeldungen für ein Patent oder eine Erfindersurkunde nachstehend gekennzeichnet, die ein Anmeldedatum haben, das vor dem Anmeldedatum der Anmeldung liegt, für die Priorität beansprucht wird.	I hereby claim foreign priority benefits under Title 35, United States Code, §119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

IDNR: 2590 / V: 99-1.00 / B:Val

German Language Declaration

Priorität beansprucht

Priority Claimed

<u>19929933.1</u>	<u>DE</u>	<u>29.06.1999</u>	☒	☐
(Number)	(Country)	(Day Month Year Filed)	Yes	No
(Nummer)	(Land)	(Tag Monat Jahr eingereicht)	Ja	Nein

			☐	☐
(Number)	(Country)	(Day Month Year Filed)	Yes	No
(Nummer)	(Land)	(Tag Monat Jahr eingereicht)	Ja	Nein

			☐	☐
(Number)	(Country)	(Day Month Year Filed)	Yes	No
(Nummer)	(Land)	(Tag Monat Jahr eingereicht)	Ja	Nein

Ich beanspruche hiermit gemäss Absatz 35 der Zivil-prozessordnung der Vereinigten Staaten, Paragraph 120, den Vorzug aller unten aufgeführten Anmel-dungen und falls der Gegenstand aus jedem Anspruch dieser Anmeldung nicht in einer früheren amerikanischen Patentanmeldung laut dem ersten Paragraphen des Absatzes 35 der Zivilprozeßordnung der Vereinigten Staaten, Paragraph 122 offenbart ist, erkenne ich gemäss Absatz 37, Bundesgesetzbuch, Paragraph 1.56(a) meine Pflicht zur Offenbarung von Informationen an, die zwischen dem Anmeldedatum der früheren Anmeldung und dem nationalen oder PCT internationalen Anmeldedatum dieser Anmeldung bekannt geworden sind.

I hereby claim the benefit under Title 35. United States Code. §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §122, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, §1.56(a) which occured between the filing date of the prior application and the national or PCT international filing date of this application.

<u>PCT/DE00/02025</u>	<u>21.06.2000</u>	_____	<u>pending</u>
(Application Serial No.)	(Filing Date D, M, Y)	(Status)	(Status)
(Anmeldeseriennummer)	(Anmeldedatum T, M, J)	(patentiert, anhangıg, aufgegeben)	(patented, pending, abandoned)

_____		_____	
(Application Serial No)	(Filing Date D,M,Y)	(Status)	(Status)
(Anmeldeseriennummer)	(Anmeldedatum T, M; J)	(patentiert, anhangıg, aufgeben)	(patented, pendıng, abandoned)

Ich erkläre hiermit, dass alle von mir in der vorliegen-den Erklärung gemachten Angaben nach meinem besten Wissen und Gewissen der vollen Wahrheit entsprechen, und dass ich diese eidesstattliche Erklä-rung in Kenntnis dessen abgebe, dass ich wissentlich und vorsätzlich falsche Angaben gemäss Paragraph 1001, Absatz 18 der Zivilprozessordnung der Vereinigten Staaten von Amerika mit Geldstrafe belegt und/oder Gefängnis bestraft werden koennen, und dass derartig wissentlich und vorsätzlich falsche Angaben die Gül-tigkeit der vorliegenden Patentanmeldung oder eines darauf erteilten Patentes gefährden können.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

German Language Declaration

<table>
<tr>
<td>VERTRETUNGSVOLLMACHT: Als benannter Erfinder beauftrage ich hiermit den nachstehend benannten Patentanwalt (oder die nachstehend benannten Patentanwälte) und/oder Patent-Agenten mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Geschäfte vor dem Patent- und Warenzeichenamt: (Name und Registrationsnummer anführen)</td>
<td>POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (list name and registration number)</td>
</tr>
</table>

And I hereby appoint

Customer No. 007470

Telefongespräche bitte richten an: (Name und Telefonnummer)	Direct Telephone Calls to: (name and telephone number)
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Voller Name des einzigen oder ursprunglichen Erfinders: I-OO	Full name of sole or first inventor.
JOACHIM SCHMITT	JOACHIM SCHMITT
Unterschrift des Erfinders Datum	Inventor's signature Date
	Schmitt Joachim 10.12.01
Wohnsitz	Residence
GROSSENSEEBACH, DEUTSCHLAND	GROSSENSEEBACH, GERMANY DEK
Staatsangehorigkeit	Citizenship
DEUTSCH	GERMANY
Postanschrift	Post Office Addess
FÖHRENWEG 15	FÖHRENWEG 15
91091 GROSSENSEEBACH DEUTSCHLAND	91091 GROSSENSEEBACH GERMANY
Voller Name des zweiten Miterfinders (falls zutreffend)·	Full name of second joint inventor, if any.
Unterschrift des Erfinders Datum	Second Inventor's signature Date
Wohnsitz	Residence
,	,
Staatsangehorigkeit	Citizenship
Postanschrift	Post Office Address

(Bitte entsprechende Informationen und Unterschriften im Falle von dritten und weiteren Miterfindern angeben).	(Supply similar information and signature for third and subsequent joint inventors).

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